

**IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF TEXAS
LUFKIN DIVISION**

**LEWIS E. KNAPPER AND
LINDA KNAPPER,**

Plaintiffs,

VS.

**SAFETY KLEEN SYSTEMS, INC.;
ARISTECH CHEMICAL CORP.;
CHARLOTTE PIPE & FOUNDRY CO.;
RADIATOR SPECIALTY COMPANY;
SUNOCO, INC. (R&M); UNITED
STATES STEEL CORP.; USX CORP.;
NIBCO, INC. AND OATEY CO.**

Defendants.

§ 87(2)(b)

CIVIL ACTION FILE No: 9:08-Cv-84

**PLAINTIFF’S SUPPLEMENT TO THEIR
MOTION TO EXCLUDE JOHN SPENCER**

TO THE HONORABLE JUDGE OF THE COURT:

Plaintiffs file this Supplement to their Motion to Exclude Defendants' Expert, John Spencer, and all of his opinions and testimony being offered by Radiator Specialty Company (RSC), United States Steel Corporation (USS), Aristech Chemical Corporation, USX Corporation and Sunoco, Inc. (R&M), (collectively referred to as "Defendants") and in support thereof Plaintiffs would respectfully show the Court as follows:

I. Procedural Background

Mr. John Spencer was designated as an expert for the Defendants in this case on July 9, 2009. The deadline to file Motions to Exclude in this case was July 23, 2009. Mr. Spencer was not deposed until July 22, 2009 and copies of Mr. Spencer's deposition transcript were not available prior to the July 23, 2009 deadline. Accordingly, Plaintiffs are filing this supplement to

their motion to exclude.

II. Argument

A. **Mr. Spencer is not a chemical engineer or chemist and is not qualified as an expert in this field.**

Defendants' expert, John Spencer, is offering several opinions in this case for which he is simply not qualified to render. For example, if allowed to testify at trial, Mr. Spencer, will not aid the jury but instead confuse the jury by offering opinions on the evaporation rate of benzene from complex hydrocarbon mixtures which are not grounded in the fundamental principles of chemistry or chemical engineering. By his own admission, Mr. Spencer is not qualified by education, experience, training, skill, or knowledge to render any opinions requiring expertise in chemistry or chemical engineering principals.

John Spencer has a B.S. in Biological Sciences and has taken graduate level courses in environmental biology, but never completed his thesis. *See Exhibit 1*, pp. 9-10. He is not an expert in chemistry or chemical engineering. *See id* at p. 9, 21-25; p. 12, 7-9, *See Exhibit 3*, p. 115, 4-5. Despite Mr. Spencer's lack of expertise in chemistry and chemical engineering, he is planning to offer opinions critical of Plaintiffs' expert, Stephen Petty's opinions concerning the evaporation rate of benzene from complex mixtures and the activity coefficients and other variables which effect evaporation.

In contrast to Mr. Spencer, Mr. Petty possesses a B.S. and M.S. in Chemical Engineering from the University of Washington in addition to being a Certified Industrial Hygienist and Registered Professional Engineer in Texas, Kentucky, Ohio, Pennsylvania, and West Virginia. Despite the overwhelming disparity in their qualifications, Mr. Spencer has testified that he "knows chemicals pretty well having worked at the National Institutes of Health in the laboratory in chemistry while he was in college." *See Exhibit 2*, p. 67, 16-25, p. 68, 1-6, 11-14. Qualifying

as an expert in a given field under Rule 702 requires the expert to show more experience and training than a part-time job in Bethesda, Maryland. Without extensive education or training in chemistry or chemical engineering, Mr. Spencer cannot provide reliable opinions in this highly specialized field.

In *Cooper Tire & Rubber Co. v. Mendez, et. al.*, 204 S.W.3d 797 (Tex. 2006), the Texas Supreme Court held that a chemist employed by the Georgia Tech Research Institute with an undergraduate degree in chemistry and a master's degree in polymer science was not qualified to testify on certain issues in a tire belt separation case because the expert lacked more specialized education, training, or experience in tire chemistry. If a chemist with an advanced degree in polymer science is not qualified to render opinions regarding tire chemistry, certainly an Industrial Hygienist with an undergraduate degree in biological science is not qualified to opine on the evaporation rate of volatile constituents in a complex hydrocarbon mixture. Therefore, John Spencer is not qualified to render any opinions on this issue and should be excluded.

B. John Spencer's 2009 experimental data on the evaporation rate of benzene from Liquid Wrench is not reliable.

Although completely lacking in the qualifications necessary to perform such an analysis, in June of 2009, Mr. Spencer performed a study "to evaluate the rate at which benzene evaporates as a pure substance and from a reformulated product based on the historical production records of the raffinate-containing version of Liquid Wrench manufactured in the 1960 to 1978 timeframe." See Spencer Expert Report, **Exhibit B** at p.13, attached to Plaintiffs' Motion to Exclude John Spencer. *Dkt. # 181*. Spencer's study concludes that the evaporation half-life of benzene in Liquid Wrench is on average less than three minutes. See Spencer Summary Report, **Exhibit C**, at p. 11, attached to Plaintiffs' Motion to Exclude John Spencer. *Dkt. # 181*. A three minute evaporation half-life for benzene in Liquid Wrench is contrary to

fundamental principles of chemistry and chemical engineering and had Mr. Spencer possessed the necessary qualifications in this area, he likely would have noticed how far out in “left field” his numbers really are.

Since the experimental study and data has not been published it has not been subject to peer review. Spencer’s Summary Report derives the evaporation half-life data for benzene from a “simulated” Liquid Wrench formulation using what he calls a Glove-box Type Evaporation Chamber (“GBTEC”). In his expert report, Mr. Spencer makes no mention of the reason for the choice of a GBTEC apparatus for testing the evaporation rate of a petroleum solvent. Specifically, there is no mention that the technique has been approved by ASTM for this purpose or any reference to scientific literature that has used this approach in a peer reviewed journal. Mr. Spencer also fails to cite to any scientific literature that states that his use of the GBTEC is proper or generally accepted in the scientific community. Mr. Spencer admitted in his deposition that there was no authority which would allow for this test to be conducted using the GBTEC. *See Exhibit 3*, p. 148, 24-25, p. 149, 1-5. The evaporation data acquired by the GBTEC apparatus is suspect and utilizing the GBTEC in such a manner is novel science that has not been tested or generally accepted in the scientific community.

The results from Mr. Spencer’s experiment have not been tested and there is no known rate of error. By his own admission, Mr. Spencer never attempted to test the calibrations on the GBTEC to make sure it was accurate. *See Exhibit 3*, p. 154, 22-25, p. 155, 1-9. Mr. Spencer could have easily tested the calibrations on the GBTEC by testing the evaporation rates of pure liquids that have a known rate of evaporation. Mr. Spencer could have then compared his results to the published data. In his deposition, Mr. Spencer claimed that there was no literature available discussing the evaporation rate of pure benzene. *See Exhibit 3*, p. 146, 7-16. This is

curious considering Mr. Petty found such literature. Perhaps if Mr. Spencer was a chemist or chemical engineer, he would have been able to locate the relevant literature. If the GBTEC calibrations and data were accurate, Mr. Spencer's results would have mirrored the data in the published literature. Mr. Spencer's failure to test the calibrations on his GBTEC renders the data from his experiment untested and inadmissible under *Daubert*.

Mr. Spencer's inability to account for more than half of the benzene mass in his experiment is another indicator of the unreliability of his experiment. In his report and deposition, Mr. Spencer attempts to explain away this massive error by "hypothesizing" that the benzene to cyclohexane ratio in the mixture somehow suppressed the ability of the mass spectrometer to detect the benzene in the chamber. See Spencer Summary Report, **Exhibit C**, at pp. 10-11, attached to Plaintiffs' Motion to Exclude John Spencer. *Dkt. # 181*. Mr. Spencer testified that he was unaware that signal suppression might occur. See **Exhibit 3**, p. 218, 6-24. Considering Mr. Spencer's clients, Radiator Specialty Company, and United States Steel Corporation have used this smokescreen before in an attempt to explain away Mobil Oil's 1977 analysis of Liquid Wrench which found benzene concentrations as high as 30%, Mr. Spencer's testimony is implausible. See **Exhibit 3**, p. 221, 2-22; see **Exhibit 4**, Mobil Analysis.

Since at least 2003 in *Awalt v. Allied Signal Corporation, et. al.*, a case in which John Spencer served as an expert for Radiator Specialty Company and United States Steel Corporation, both companies have attempted to argue that the 30% benzene finding by Mobil was caused by interference from the cyclohexane in the mixture. See **Exhibit 5**, pp. 22-28, pp. 67-68. It seems odd, and all too convenient, that cyclohexane in the presence of benzene can apparently create artificially low benzene readings and artificially high benzene readings in a gas chromatograph depending on what Defendants and Mr. Spencer want the result to be. In fact,

Radiator Specialty Company asserted this smokescreen again during Mr. Petty's deposition, to which Mr. Petty responded that the instrumentation in 1970s and today would be capable of distinguishing between the two. *See Exhibit 6*, pp. 264-268. Furthermore, Mr. Spencer testified that he was told the signal suppression was occurring by a chemist, Adam Keil, presumably employed by Mr. Spencer, who was operating the equipment. *See Exhibit 3*, p. 218-225. This is another example of how Mr. Spencer is not qualified to render any opinions on these issues. Perhaps Mr. Keil should be the expert in this case and not Mr. Spencer. In any event, Mr. Spencer's inability to reliably account for half of the benzene during the experiment renders the experiment useless and unreliable.

Additionally, the data collected from Mr. Spencer's experiment does not mimic the working environment in which Mr. Knapper worked, rendering the data irrelevant to the case at hand. For example, Mr. Spencer's data does not attempt to provide data for low velocities (e.g. variable air flow), which is important because a plumber like Mr. Knapper works in confined spaces (e.g., under sinks) where ventilation can be poor. The data Mr. Spencer uses to formulate his opinion does not "fit" the facts of this case and is not relevant. *See Moore v. Ashland Chem. Inc.*, 151 F.3d 269, 279 (5th Cir. 1998). Also, Mr. Spencer testified that Liquid Wrench is applied in drops and not squirted. *See Exhibit 3*, p. 122, 11-21. Mr. Spencer ignores Mr. Knapper's testimony that he squirted Liquid Wrench onto pipes and fixtures during his plumbing work. *See Exhibit 7*, pp. 29-31.

Curiously, the evaporation rate of benzene from Liquid Wrench that Mr. Spencer derives from his experiment mirrors the calculations of Dr. Drivas. Dr. Drivas' calculations, which are the basis of a separate motion to exclude, are grossly incorrect and contrary to Dr. Drivas' deposition testimony. As graphically expressed in **Exhibit 8**, attached hereto, Mr. Spencer's

data, likewise, does not pass the “smell test”. It is important to note that the only peer reviewed published literature to which Mr. Spencer or Dr. Drivas cite in support their results are based upon data that was bought and paid for by either United States Steel Corporation or Safety Kleen Systems, Inc., both of which are defendants in this lawsuit.¹ It is also worth noting that during his deposition, Mr. Spencer all but admitted that his data was suspect and even went so far as to ask Mr. Petty to help him run his experiment again “cause it’s rather new data.” See **Exhibit 3**, p. 204, 6-11.

C. Mr. Spencer’s “Simulated” Liquid Wrench formulations are not similar to the Liquid Wrench Mr. Knapper used.

Mr. Spencer’s 2002 and 2009 simulated Liquid Wrench formulations are not remotely similar to the Liquid Wrench Mr. Knapper used prior to 1979. During his deposition, Mr. Spencer admitted that he did not attempt to mimic the pre-1979 formulation of Liquid Wrench for his 2002 experiment. See **Exhibit 3**, p. 63-64. He also testified during trial in 2004 that his 2002 formulation would release the benzene more readily than the historical version of the product. See **Exhibit 9**, pp. 1470-1477. Because his 2002 experiment bears absolutely no relationship to the pre-1979 formulation of Liquid Wrench, Mr. Spencer’s opinions concerning his 2002 data should be excluded.

With respect to his 2009 formulation, Mr. Spencer provided very little information regarding the simulated Liquid Wrench. During his deposition Mr. Spencer testified that he obtained the petroleum-based raffinate from ChemRisk, Inc. See **Exhibit 3**, p. 167, 5-15. ChemRisk had originally obtained the petroleum based raffinate from Sunoco, Inc. (R&M) in 2005. Sunoco, Inc. (R&M) is another defendant in this case and is the party, based upon information and belief, that has actual liability for the raffinate sales to Radiator Specialty

¹ Plaintiffs have recently settled with Safety Kleen Systems, Inc.

Company for use in pre-1979 Liquid Wrench. At the behest of, and completely financed by United States Steel Corporation, Dr. Dennis Paustenbach and Pamela Williams of ChemRisk performed an experiment in an attempt to determine the likely benzene exposures from the use of Liquid Wrench to use as a defense in litigation. After editing by lawyers from Radiator Specialty Company and United States Steel Corporation, Dr. Paustenbach and Pamela Williams submitted the manuscript for publication. The Paustenbach/Williams data set is relied upon by Dr. Drivas and Mr. Spencer to support their opinions in this case.

Having obtained at least 5 year old petroleum based raffinate from ChemRisk, Inc., Mr. Spencer used the raffinate to create what he calls a Reformulated Penetrating Solvent (RPS) to “simulate” the original Liquid Wrench product (OP). A comparison between Mr. Spencer’s reformulated Liquid Wrench (RPS), and the Liquid Wrench that Mr. Knapper used (OP), poses serious questions regarding the validity of Mr. Spencer’s data. As shown graphically in **Exhibit 10**, attached hereto, Mr. Spencer’s 2009 RPS was more volatile than the OP and is actually more volatile than pure benzene. The graph also depicts that Radiator Specialty Company’s own data indicate that the average volatility of the OP was lower than that of pure benzene. Given the fundamental principle of chemistry and chemical engineering that, at least initially, the volatile components in a hydrocarbon mixture evaporate at a rate similar to the evaporation rate of the bulk mixture as a whole, it is no wonder that Mr. Spencer’s 2009 data reflect an extremely fast evaporation rate. However, the fact remains that Mr. Spencer’s 2009 RPS formulation, concocted for litigation, does not resemble in any way, the pre-1979 product that Mr. Knapper used and the data derived from Mr. Spencer’s experiment is unreliable.

IV. Request for Relief

For these reasons, Plaintiffs respectfully ask the Court to exclude John Spencer's testimony and grant all other relief the Court deems appropriate.

Respectfully submitted,

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/s/ Thao D. Ho

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CERTIFICATE OF SERVICE

The undersigned certifies that the foregoing document was filed electronically in compliance with Local Rule CV-5(a). As such, this motion was served on all counsel who are deemed to have consented to electronic service. Local Rule CV-5(a)(3)(A). Pursuant to Fed. R. Civ. P. 5(d) and Local Rule CV-5(d) and (e), all other counsel of record not deemed to have consented to electronic service were served with a true and correct copy of the foregoing by email, on this the 7th day of August, 2009.

/s/ Thao D. Ho

Thao D. Ho